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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/665,591 | 09/18/2003 | Takao Yamanouchi | KOY-6 | 6834 |

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EXAMINER

RODEE, CHRISTOPHER D

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| ART UNIT | PAPER NUMBER |
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1756

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/665,591

Applicant(s)

YAMANOUCHI ET AL.

Examiner

Christopher RoDee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 9-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-16 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-8, drawn to a toner, classified in class 430, subclass 110.4.
- II. Claims 9-17, drawn to image forming methods, classified in class 430, subclass 120.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different method, such as cascade developing a latent image on the surface of a photoreceptor. Such a process would not use a toner carrier or a toner layer limiting member as specified in the instant process because the toner is carried in small buckets.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Don Lucas on 16 May 2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-8. Affirmation of this election must be made by applicant in replying to this Office action. Claims 9-17 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The instant claims specify the toner as having a compressive strength of 14 to 20. These numerical values are without units. The specification discloses a specific method of determining the compressive strength (spec. pp. 86-87). The pertinent prior art (JP 8-254851) indicates that compressive strength can be measured in units of kfg/mm². It is unclear from the claims in light of the specification disclosure what the claimed numeric value is measuring. It is unclear if this strength represents a force against the toner (as in the JP reference) or a distance of compression or some other value. Because it is unclear what is being measured the claims as currently presented are indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8 are rejected under 35 U.S.C. 102(a) and/or (e) as being anticipated by Horiuchi *et al.* in US Patent Application Publication 2003/0027072.

The instant claims are directed to a toner formed by a salting out/fusing process of resin particles and colorant particles in a water based medium. This toner has a compressive strength of 14 to 20 with a standard deviation of smaller than 1. Additional limitations are present with respect to the molecular weight characteristics, additives, softening point, , average particle size, and circularity. The instant specification states, "as the multi-step polymerization is the three-step polymerization method for producing a composite resin particle comprised of a central portion (core) comprising a high molecular weight resin, an intermediate layer comprised of a medium molecular weight resin and containing a releasing agent, and an outer layer (shell) comprised of a low molecular weight resin." See specification passage spanning pages 40 and 41. The specification also teaches, "by decreasing the molecular weight of resins forming respective layers from the central layer toward the outer layer, it is possible to obtain a desired compressive strength." Specification page 41, 2nd full paragraph.

A rejection follows based on inherency of a prior art composition. "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990).

Horiuchi discloses a toner formed by a salting out/fusing process using a multistep polymerization method (¶ [0038], [0129] – [0134], [0142] – [0159]) to form resin particles, which are then combined with fine coloring resin particles (¶ [0162] – [0172]). The toner produced in the passage spanning ¶¶ [0370] – [0392] has a three layer structure for the resin particles and each resin layer has a decreasing molecular weight from the layer interior to it (¶ [0385]). In fact, the molecular weights for the resin particles' layers are the same as disclosed for the specification for the inventive toner (¶ [0385] and spec. pp. 74, l. 6-10). The reference's process of forming the resin particles, the colorant particles, and the toner by salting out/fusing uses the same monomers in either the same or similar amounts and under the same or substantially similar process conditions as the instant invention. Compare the following: ¶¶ [0371] – [0374] with spec. p. 70, l. 19 – p. 71, l. 19; ¶¶ [0375] – [0382] with spec. p. 71, l. 20 – p. 73, l. 10; ¶¶ [0383] – [0385] with p. 73, l. 11 – p. 74, l. 10; ¶ [0389] with spec p. 75, l. 1-16; ¶¶ [0390] – [0392] with spec. p. 77, l. 7 – p. 78, l. 14. Note the other colored toners produced by the same or similar process steps, including the yellow, cyan, and magenta toners that have external additives added to produced toner particles (¶ [0423] – [0424]). These colored toners have the relationship for layer molecular weight as discussed above. As seen in these corresponding passages, the materials and process conditions are substantially similar between the reference and the specification. This provides a *prima facie* reason for the artisan to expect the reference's toners to inherently have the requisite compressive strength, softening point, and

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circularity of the claims. The Examiner has met the requisite burden to provide sufficient reason to believe that the prior art composition inherently meets the requirements of the instant claims.

With respect to the process of use language in the preamble of claim 5's toner, this language is seen as an intended use of the toner and does not provide any further limitation on the toner than those recitations presented in lines 13-20. If the process steps do provide any further limitation on the toner, applicants are asked to fully explain these limitations in the written response.

"[T]he discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer." *Atlas Powder Co. v. Ireco Inc.*, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 195 USPQ 430, 433 (CCPA 1977). There is no requirement that a person of ordinary skill in the art would have recognized the inherent disclosure at the time of invention, but only that the subject matter is in fact inherent in the prior art reference. *Schering Corp. v. Geneva Pharm. Inc.*, 67 USPQ2d 1664, 1668 (Fed. Cir. 2003).

A copy of the publication of the parent application accompanies this Office action to show that the subject matter relied upon was present in that parent.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher RoDee whose telephone number is 571-272-1388. The examiner can normally be reached on most weekdays from 6:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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24 May 2005